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Use Attainability Analysis for Barataria and Terrebonne Basins

Table D-1. Fish species found through rotenone sampling at inland reference sites. Data includes that collected by LDEQ and LDWF during the July-August 2005 sampling event and historical LDWF data collected from 2001 through 2005 in the Barataria and Terrebonne Basins.

'X' indicates the fish species was observed at the site. F – freshwater, E – estuarine, M – marine, and F/M – mixed freshwater and marine; LDWF – LA Department of Wildlife and Fisheries; LDEQ – LA Department of Environmental Quality.

Quality.		Ecoregion, Waterbody Type, Waterbody Name, and Site No./Map ID									
			L	ower Missis	ssippi River	Alluvial Plai	n Ecoregion				
		Lake									
	Estuarine, Marine, or Freshwater	Grassy Lake (LDWF)	Pierre Part Bay (LDWF)	Pierre Part Bay (LDWF)	Lake Verret (LDWF/ LDEQ)	Lake Verret (LDWF/ LDEQ)	Lake Palourde (LDWF/ LDEQ)	Lake Palourde (LDWF/ LDEQ)	Lake Palourde (LDWF/ LDEQ)		
Species Description	Species	1016	1017	1018	3106	3107	3111	3112	3113		
AMERICAN EEL	F/M	X	X	X				X	X		
ATLANTIC NEEDLEFISH	Е		X	X			X				
BAY ANCHOVY	Е	Χ	X	X	X	X	X	X	X		
BIGMOUTH BUFFALO	F	Х	X	X					Х		
BLACK BUFFALO	F		X								
BLACK BULLHEAD	F	Χ	Х	X	X	X					
BLACK CRAPPIE	F	Х	Х	Х	Х	Х	X	X	Χ		
BLUE CATFISH	F	Χ	X	X		X		X	X		
BLUEGILL	F	Χ	X	X	X	Х	X	X	Х		
CARP	F	Χ	X	X					X		
CHANNEL CATFISH	F	Х	Х	Х	X	X	X	X	Х		
CLOWN GOBY	Е	Х	X	Х	Х	X	X	Х	Х		
DARTER	F	Χ	X								
FLATHEAD CATFISH	F	Χ	Х	X	X		X	X	Χ		
FRESHWATER DRUM	F	Χ	X	Х	X	X	X	X	Χ		
GIZZARD SHAD	F	Х	Х	Х	X	X	Х	X	Χ		
GOLDEN SHINER	F								Х		
GULF PIPEFISH	Е	Χ	X	X	X	X					
HOGCHOKER	Е	Х	Х	Х				Х	Х		
HYBRID SUNFISH	F		Х			Х					
LADYFISH	Е	Х		Х			Х		Х		
LARGEMOUTH BASS	F	Х	Х	Х	Х	Х	Х	Х	Х		
LINED SOLE	Е	X	Х	Х	Х	X	Х				

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	Ecoregion, Waterbody Type, Waterbody Name, and Site No./Map II										
							n Ecoregion				
	[Lake									
	Estuarine, Marine, or Freshwater	Grassy Lake (LDWF)	Pierre Part Bay (LDWF)	Pierre Part Bay (LDWF)	Lake Verret (LDWF/ LDEQ)	Lake Verret (LDWF/ LDEQ)	Lake Palourde (LDWF/ LDEQ)	Lake Palourde (LDWF/ LDEQ)	Lake Palourde (LDWF/ LDEQ)		
Species Description	Species	1016	1017	1018	3106	3107	3111	3112	3113		
LONGEAR SUNFISH	F	Χ	X	X		X	X	X	X		
LONGNOSE GAR	F			X							
MADTOMS	F	Χ	X	X	X	X	X	X			
ORANGESPOTTED SUNFISH	F	X	X	X							
PIRATE PERCH	F				Х		Х				
REDEAR SUNFISH	F	Х	Х	Х	Х		Х		Х		
SHEEPSHEAD	E			Х			Х				
SHORTNOSE GAR	F			Х							
SKIPJACK HERRING	F	Χ	X	Х	X	X					
SMALLMOUTH BUFFALO	F	Χ	X	Х		X	X	X	Х		
SPECKLED WORM EEL	E	Χ	X		X		X		Х		
SPOTTED GAR	F	Χ	X	Х		X	X	X	Х		
SPOTTED SUNFISH	F			Х			Х				
STRIPED MULLET	Е	Χ	X	X	X	X	X	X	X		
THREADFIN SHAD	F	Х	Х	X				Х	Х		
WARMOUTH	F	Χ	X	X	X	X	X		X		
WHITE BASS	F	Χ	Х	X							
WHITE CRAPPIE	F		X	X							
YELLOW BASS	F	Χ	X	X		X		X	X		
YELLOW BULLHEAD	F			X			X		Х		
Total Number of Species per Site		32	35	37	19	21	24	19	26		

Table D-2. Fish species found through electroshocking at reference sites during the May 2005, July-August 2005, and March 2006 sampling events conducted for the Barataria-Terrebonne Use Attainability Analysis.

'X' indicates the fish species was observed at the site. F – freshwater; E – estuarine; M – marine; and F/E/M – mixed freshwater, estuarine, and marine.

Trestiwater, estadinie, and i	Ecoregion, Waterbody Type, Waterbody Name, and Site No./Map ID										
		Lower N	/lississippi R	coregion	Coastal De						
				Stream		Ecore	_				
				Lake	Stream						
	Estuarine,			Grand Bayou at	Grand Bayou	Lake	Bayou				
	Marine, or Freshwater	Upper Grand River (LDEQ)	Pat Bay (LDEQ)	Bayou Corne (LDEQ)	SW of Belle Rose (LDEQ)	Penchant (LDEQ)	Copasaw (LDEQ)				
Species Description	Species	3083	2750	2970	2976	0896	3007				
ATLANTIC CROAKER	E	3003	2130	2310	2310	X	3007				
ATLANTIC SPADEFISH	M					Λ	Х				
BAY ANCHOVY	E		Χ	X	X		X				
BIGMOUTH BUFFALO	F	X	X	X	Λ						
BLACK BULLHEAD	F	^		X							
BLACK CRAPPIE	F F	X	X	X	X	Х	Х				
BLUE CATFISH	F	X		X	X	X	Λ				
BLUEGILL	F .	X	Χ	X	X	X	Х				
BOWFIN	F '	X	X	X	X	Λ	Λ				
BREAM	F .	Λ	Λ	Λ	X						
BROOK SILVERSIDE	F .				X						
BROWN BULLHEAD	F.			X	X						
BULLHEAD (MUDCAT)	F.		Х								
CARP	F	Х	X	X	Х	Х	Х				
CHANNEL CATFISH	F.	X	X	X	X	X					
FLATHEAD CATFISH	F	7			X	X					
FRESHWATER DRUM	F	Х			X						
GIZZARD SHAD	F	X	Х	X	X		Х				
GOLDEN SHINER	F	,	X	X	X		X				
GOLDEN TOPMINNOW	F	Х	- ` `	,							
GREEN SUNFISH	F	X	Х	X	Х	Х	Х				
GULF KILLIFISH	E E			,		X	,				
GULF MENHADEN	E					X	Х				
GULF PIPEFISH	E					,	X				
HERRING SPP.	F/E/M				Х		,				
LADYFISH	E					Х					

		Ecoregion, Waterbody Type, Waterbody Name, and Site No./Map ID								
			/lississippi R	Coastal De						
					_	Ecore	egion			
				Lake	Stream					
	Estuarine, Marine, or Freshwater	Upper Grand River (LDEQ)	Pat Bay (LDEQ)	Grand Bayou at Bayou Corne (LDEQ)	Grand Bayou SW of Belle Rose (LDEQ)	Lake Penchant (LDEQ)	Bayou Copasaw (LDEQ)			
Species Description	Species	3083	2750	2970	2976	0896	3007			
LARGEMOUTH BASS	F	X	X	X	X	X	X			
LONGEAR SUNFISH	F		Χ	X	Χ					
LONGNOSE GAR	F	X								
ORANGESPOTTED SUNFISH	F	X	X	X	X	X	X			
PIRATE PERCH	F				Χ					
RED DRUM	Е					Χ				
REDEAR SUNFISH	F	X	Χ	X	Χ	X	X			
SHEEPSHEAD	Е					X				
SHORTNOSE GAR	F	X		X	Χ	Х				
SILVER CARP	F	X								
SILVERY MINNOW	F		Χ	X	X					
SMALLMOUTH BUFFALO	F	X	Χ	X	Χ		Х			
SPOTTED BASS	F			Х						
SPOTTED GAR	F	Х	X	X	Χ	Х	Х			
SPOTTED SUNFISH	F	Х	X							
STRIPED ANCHOVY	M	Х								
STRIPED MULLET	Е	Х	X	X	Χ	Х	Х			
THREADFIN SHAD	F	X	Χ	Х	Χ	X	Х			
WARMOUTH	F	X	Х	Х	Χ		Х			
WHITE CRAPPIE	F	X	Х	Х	Χ		Х			
YELLOW BASS	F	X								
YELLOW BULLHEAD	F				X	Χ	Х			
Total Number of Species per										
Site		26	23	26	30	20	20			

Table D-3. Fish species found through seine and gill net sampling methods at Louisiana Department of Wildlife and Fisheries (LDWF) Marine Fisheries Independent Monitoring sites from historical LDWF data (compiled from 2001 through 2005) in the Barataria and Terrebonne Basins.

'X' indicates the fish species was observed at the site. F – freshwater; E – estuarine; and M – marine.

		Ecoregion, Waterbody Type, Waterbody Name, and Site No./Map ID								
			<u> </u>	Coastal Deltaid	c Plain Ecoregion	<u> </u>				
			Bay/E	stuary		Canal				
Species Description	Estuarine, Marine, or Freshwater Species	Bay Rambo	Unnamed lake west of Caillou Lake LDWF 0550	Bay St. Honore, near Bay Rambo LDWF 0556	Unnamed bay in Wisner State WMA - near Bay Rambo LDWF 0572	Pointe Au Chien - unnamed canal SE of Montegut LDWF 0559	Pointe Au Chien - unnamed canal E of Montegut LDWF 0589			
ALLIGATOR GAR	F	EDVVI 0330	LDVVI 0330	EDVVI 0330	LDVVI 0372	X	X			
ATLANTIC BUMPER	M		Х	Х	Х					
ATLANTIC CROAKER	E	Х	X	X	X	X				
ATLANTIC NEEDLEFISH	E		X	, ,	,					
ATLANTIC SPADEFISH	M		X							
ATLANTIC STINGRAY	Е	Х	Х	Х		Х				
ATLANTIC THREADFIN	М				Х					
BAY ANCHOVY	Е		X							
BAY WHIFF	Е		Х							
BIGHEAD SEAROBIN	M	Х	Х							
BLACK DRUM	Е	Х	Х	X	Х	Х	X			
BLACKCHEEK TONGUEFISH	E		Χ							
BLUE CATFISH	F					Χ				
BLUE CRAB	Е	Χ	Χ	X	X	Χ	X			
BLUEFISH	M		X	X	X					
BROWN SHRIMP	Е		Χ		X					
BULL SHARK	M	X			X					
CHAIN PIPEFISH	Е		X							
CHANNEL CATFISH	F					X				
CLOWN GOBY	E		X							
COWNOSE RAY	M				X					
CRESTED BLENNY	M		X							
CREVALLE JACK	M	X	Χ	X	X					

		Ecoregion, Waterbody Type, Waterbody Name, and Site No./Map ID							
				Coastal Deltaid	c Plain Ecoregio	1			
			Bay/E	Canal					
Species Description	Estuarine, Marine, or Freshwater Species	Bay Rambo	Unnamed lake west of Caillou Lake LDWF 0550	Bay St. Honore, near Bay Rambo LDWF 0556	Unnamed bay in Wisner State WMA - near Bay Rambo LDWF 0572	Pointe Au Chien - unnamed canal SE of Montegut LDWF 0559	Pointe Au Chien - unnamed canal E of Montegut LDWF 0589		
DARTER GOBY	E		X						
DIAMOND KILLIFISH	F		X						
FLORIDA POMPANO	M		,		Х				
FLORIDA STONE CRAB	M			Х					
FRINGED FLOUNDER	M		Х	, ,					
GAFFTOPSAIL CATFISH	E	X	X		Х	Χ			
GIZZARD SHAD	F	X	X			X	Х		
GRAY SNAPPER	M		Х						
GULF BUTTERFISH	M		Х		Х				
GULF KILLIFISH	Е		Х						
GULF KINGFISH	M				X				
GULF MENHADEN	E	Х	Х	Х	X	Х	Х		
GULF TOADFISH	E		Х						
HARVESTFISH	M			Х	X				
INLAND SILVERSIDE	E		Х						
INSHORE LIZARDFISH	M	X							
LADYFISH	Е	X	Χ	X	Χ	Χ			
LARGEMOUTH BASS	F					Χ	X		
LEAST PUFFER	Е		X						
LEATHERJACKET	Е		X		X				
LONGNOSE KILLIFISH	E		X						
NAKED GOBY	E		X						
PERMIT	M			X					
PIGFISH	Е	X							
PINFISH	Е	X	X	X		X			
PISTOL SHRIMP	Е		X						
RAINWATER KILLIFISH	E		X						
RED DRUM	E	X	X	X	X	Χ	X		

		Ecoregion, Waterbody Type, Waterbody Name, and Site No./Map ID								
		Coastal Deltaic Plain Ecoregion								
			Bay/E		Canal					
Species Description	Estuarine, Marine, or Freshwater Species	Bay Rambo	Unnamed lake west of Caillou Lake	Bay St. Honore, near Bay Rambo LDWF 0556	Unnamed bay in Wisner State WMA - near Bay Rambo LDWF 0572	Pointe Au Chien - unnamed canal SE of Montegut LDWF 0559	Pointe Au Chien - unnamed canal E of Montegut LDWF 0589			
REDEAR SUNFISH	F	25111 0000	X	22111 0000	25111 0012	22111 0000	X			
ROUGH SILVERSIDE	E		X				7.			
ROUGHNECK SHRIMP SPP	M		X							
SAILFIN MOLLY	F		X							
SAND SEATROUT	E	Х	X	Х	Х	Х				
SCALED SARDINE	М		Χ							
SEA CATFISH	Е	Х	Χ	Х	Х	Х				
SHARPTAIL GOBY	Е		Х							
SHEEPSHEAD	Е		Χ	Х	Χ	Χ	Х			
SHEEPSHEAD MINNOW	Е		Χ							
SILVER JENNY	M		Х							
SILVER PERCH	E	Х	Х	Х	X	Х				
SKILLETFISH	E		Χ							
SKIPJACK HERRING	F		Χ		X	Χ				
SOUTHERN FLOUNDER	E	X	Χ	Х		Χ	X			
SOUTHERN HAKE	М		Χ							
SOUTHERN KINGFISH	E	X		X	Χ					
SOUTHERN STINGRAY	M				X					
SPANISH MACKEREL	М	X	Χ	X	Χ					
SPANISH SARDINE	М				X					
SPOT	E	X	X	X	X	X	X			
SPOTFIN MOJARRA	E		X							
SPOTTED GAR	F					X	X			
SPOTTED SEATROUT	E	X	X	X	X	X	X			
STRIPED ANCHOVY	M		X							
STRIPED BLENNY	M		X							
STRIPED MULLET	E	X	X	X	X	X	X			
THREADFIN SHAD	F	X	Χ	X		Χ				

		Ecoregion, Waterbody Type, Waterbody Name, and Site No./Map ID							
			Coastal Deltaic Plain Ecoregion						
			Bay/E	stuary		Car	nal		
Species Description	Estuarine, Marine, or Freshwater Species	Bay Rambo	Unnamed lake west of Caillou Lake LDWF 0550	Bay St. Honore, near Bay Rambo LDWF 0556	Unnamed bay in Wisner State WMA - near Bay Rambo LDWF 0572	Pointe Au Chien - unnamed canal SE of Montegut LDWF 0559	Pointe Au Chien - unnamed canal E of Montegut LDWF 0589		
UNIDENTIFIED MUD CRAB	E		X						
WHITE MULLET	Е		X	Х					
WHITE SHRIMP	Е	X	Х	Х	Х	Х			
Total Number of Species per Site		26	64	27	32	26	14		

Table D-4. Percent composition of freshwater, estuarine, marine, and mixed freshwater and marine fish species in the Barataria and Terrebonne Basins in data collected by LDEQ and the Louisiana Department of Wildlife and Fisheries (LDWF) and historical LDWF data compiled from 2001 through 2005.

Ecoregions: Coastal Deltaic (CDP) and Lower Mississippi River Alluvial (LMRAP) Plains Ecoregions.

	,	,	• •	,	Perce	ent Compositi	on of Fish	Species
Site Number	Site Description	Ecoregion	Waterbody Type	Year	Estuarine	Freshwater	Marine	Fresh/Marine
LDWF 1016	Grassy Lake	LMRAP	Lake	2003	5.18%	94.50%	0.00%	0.32%
LDWF 1016	Grassy Lake	LMRAP	Lake	2005	7.87%	92.13%	0.00%	0.00%
LDWF 1017	Pierre Part Bay	LMRAP	Stream	2003	7.10%	91.36%	0.00%	1.54%
LDWF 1017	Pierre Part Bay	LMRAP	Stream	2005	12.14%	87.86%	0.00%	0.00%
LDWF 1018	Pierre Part Bay	LMRAP	Stream	2003	11.29%	87.74%	0.00%	0.97%
LDWF 1018	Pierre Part Bay	LMRAP	Stream	2005	21.64%	78.36%	0.00%	0.00%
3106	Lake Verret	LMRAP	Lake	2005	19.01%	80.99%	0.00%	0.00%
3107	Lake Verret	LMRAP	Lake	2005	7.04%	92.96%	0.00%	0.00%
3111	Lake Palourde	LMRAP	Lake	2005	10.17%	89.83%	0.00%	0.00%
3112	Lake Palourde	LMRAP	Lake	2005	5.11%	92.05%	0.00%	2.84%
3113	Lake Palourde	LMRAP	Lake	2005	18.27%	77.66%	0.00%	4.06%
0896	Lake Penchant	CDP	Lake	2006	79.43%	20.57%	0.00%	0.00%
2750	Pat Bay	LMRAP	Stream	2006	1.95%	98.05%	0.00%	0.00%
2970	Grand Bayou 1	LMRAP	Stream	2005	3.94%	96.06%	0.00%	0.00%
2970	Grand Bayou 1	LMRAP	Stream	2006	3.00%	97.00%	0.00%	0.00%
2976	Grand Bayou 2	LMRAP	Stream	2005	8.22%	91.51%	0.00%	0.27%
2976	Grand Bayou 2	LMRAP	Stream	2006	11.35%	88.65%	0.00%	0.00%
3007	Bayou Copasaw	CDP	Stream	2006	45.83%	54.17%	0.00%	0.00%
3083	Upper Grand River	LMRAP	Stream	2006	9.98%	89.84%	0.18%	0.00%
LDWF 0536	Bay Rambo	CDP	Bay/Estuary	2001	98.87%	0.10%	1.02%	0.00%
LDWF 0536	Bay Rambo	CDP	Bay/Estuary	2002	98.05%	0.00%	1.95%	0.00%
LDWF 0536	Bay Rambo	CDP	Bay/Estuary	2003	96.89%	0.24%	2.87%	0.00%
LDWF 0536	Bay Rambo	CDP	Bay/Estuary	2004	98.19%	0.26%	1.55%	0.00%
LDWF 0556	Bay Rambo	CDP	Bay/Estuary	2001	95.14%	0.35%	4.51%	0.00%
LDWF 0556	Bay Rambo	CDP	Bay/Estuary	2002	94.64%	0.00%	5.36%	0.00%
LDWF 0556	Bay Rambo	CDP	Bay/Estuary	2003	93.39%	0.41%	6.20%	0.00%
LDWF 0556	Bay Rambo	CDP	Bay/Estuary	2004	96.76%	0.00%	3.24%	0.00%
LDWF 0572	Bay Rambo	CDP	Bay/Estuary	2001	89.28%	0.00%	10.72%	0.00%
LDWF 0572	Bay Rambo	CDP	Bay/Estuary	2002	96.26%	0.00%	3.74%	0.00%

					Perce	ent Compositi	on of Fish	Species
Site Number	Site Description	Ecoregion	Waterbody Type	Year	Estuarine	Freshwater	Marine	Fresh/Marine
LDWF 0572	Bay Rambo	CDP	Bay/Estuary	2003	44.23%	0.00%	55.77%	0.00%
LDWF 0572	Bay Rambo	CDP	Bay/Estuary	2004	91.29%	0.15%	8.56%	0.00%
LDWF 0550	W of Caillou Lake	CDP	Bay/Estuary	2001	99.63%	0.00%	0.37%	0.00%
LDWF 0550	W of Caillou Lake	CDP	Bay/Estuary	2002	99.88%	0.04%	0.08%	0.00%
LDWF 0550	W of Caillou Lake	CDP	Bay/Estuary	2003	99.48%	0.10%	0.42%	0.00%
LDWF 0550	W of Caillou Lake	CDP	Bay/Estuary	2004	98.28%	1.37%	0.34%	0.00%
LDWF 0589	Canal E of Montegut	CDP	Canal	2001	96.91%	3.09%	0.00%	0.00%
LDWF 0589	Canal E of Montegut	CDP	Canal	2002	90.63%	9.37%	0.00%	0.00%
LDWF 0589	Canal E of Montegut	CDP	Canal	2003	85.77%	14.23%	0.00%	0.00%
LDWF 0589	Canal E of Montegut	CDP	Canal	2004	72.23%	27.77%	0.00%	0.00%
LDWF 1005	Little Lake	CDP	Lake	2002	61.36%	25.00%	13.64%	0.00%
LDWF 1005	Little Lake	CDP	Lake	2003	95.65%	4.35%	0.00%	0.00%
LDWF 1005	Little Lake	CDP	Lake	2004	91.67%	8.33%	0.00%	0.00%
LDWF 0559	Canal SE of Montegut	CDP	Canal	2001	89.28%	0.00%	10.72%	0.00%
LDWF 0559	Canal SE of Montegut	CDP	Canal	2002	96.26%	0.00%	3.74%	0.00%
LDWF 0559	Canal SE of Montegut	CDP	Canal	2003	44.23%	0.00%	55.77%	0.00%
LDWF 0559	Canal SE of Montegut	CDP	Canal	2004	91.29%	0.15%	8.56%	0.00%

Table D-5. Species richness (number of species observed), abundance (number of individuals observed), and Shannon-Wiener Diversity Index (H`) values for fish collected at LDEQ reference sites and from Louisiana Department of Wildlife and Fisheries (LDWF) historical data compiled from 2001 to 2005 in the Barataria and Terrebonne Basins.

Program Abbreviations: IFI – LDWF Inland Fisheries Independent, MFI – LDWF Marine Fisheries Independent, BTUAA – Barataria and Terrebonne Use Attainability Analysis. Ecoregions: Coastal Deltaic Plain (CDP) and Lower Mississippi River Alluvial Plain (LMRAP).

	(2000) 17				Species Richness	Abundance			
Site			Waterbody		(# of	(# of			
Number	Site Description	Ecoregion	Type	Year	species)	individuals)	H,	Sampling Method(s)	Program
LDWF 1016	Grassy Lake	LMRAP	Lake	2003	27	309	2.67	Rotenone, 1 acre	IFI
LDWF 1016	Grassy Lake	LMRAP	Lake	2005	19	89	2.53	Rotenone, 1 acre	IFI
LDWF 1017	Pierre Part Bay	LMRAP	Stream	2003	30	324	2.69	Rotenone, 1 acre	IFI
LDWF 1017	Pierre Part Bay	LMRAP	Stream	2005	23	206	2.64	Rotenone, 1 acre	IFI
LDWF 1018	Pierre Part Bay	LMRAP	Stream	2003	30	310	2.77	Rotenone, 1 acre	IFI
LDWF 1018	Pierre Part Bay	LMRAP	Stream	2005	24	134	2.84	Rotenone, 1 acre	IFI
3106	Lake Verret	LMRAP	Lake	2005	19	121	2.49	Rotenone, 1 acre	IFI/BTUAA
3107	Lake Verret	LMRAP	Lake	2005	21	71	2.28	Rotenone, 1 acre	IFI/BTUAA
3111	Lake Palourde	LMRAP	Lake	2005	24	118	2.78	Rotenone, 1 acre	IFI/BTUAA
3112	Lake Palourde	LMRAP	Lake	2005	19	176	2.46	Rotenone, 1 acre	IFI/BTUAA
3113	Lake Palourde	LMRAP	Lake	2005	26	197	2.81	Rotenone, 1 acre	IFI/BTUAA
0896	Lake Penchant	CDP	Lake	2006	15	141	1.3	Electro-shocker	BTUAA
								Electro-shocker,	
2750	Pat Bay	LMRAP	Stream	2006	23	564	2.03	Hoop Net, Seine	BTUAA
2970	Grand Bayou 1	LMRAP	Stream	2005	24	634	2.37	Electro-shocker	BTUAA
2970	Grand Bayou 1	LMRAP	Stream	2006	12	300	1.5	Electro-shocker	BTUAA
2976	Grand Bayou 2	LMRAP	Stream	2005	28	377	2.45	Electro-shocker	BTUAA
2976	Grand Bayou 2	LMRAP	Stream	2006	18	141	2.11	Electro-shocker	BTUAA
3007	Bayou Copasaw	CDP	Stream	2006	13	72	2.23	Electro-shocker	BTUAA
								Electro-shocker,	
3083	Upper Grand River	LMRAP	Stream	2006	26	561	2.21	Hoop Net, Seine	BTUAA
LDWF 0536	Bay Rambo	CDP	Bay/Estuary	2001	18	977	0.74	Gill Net - Varying Sizes	MFI
LDWF 0536	Bay Rambo	CDP	Bay/Estuary	2002	16	512	1.32	Gill Net - Varying Sizes	MFI
LDWF 0536	Bay Rambo	CDP	Bay/Estuary	2003	18	418	1.4	Gill Net - Varying Sizes	MFI
LDWF 0536	Bay Rambo	CDP	Bay/Estuary	2004	19	387	1.95	Gill Net - Varying Sizes	MFI
LDWF 0556	Bay Rambo	CDP	Bay/Estuary	2001	19	288	2.17	Gill Net - Varying Sizes	MFI

	1				Species			F F	1.6
					Richness	Abundance			
Site			Waterbody		(# of	(# of			
Number	Site Description	Ecoregion	Type	Year	species)	individuals)	H,	Sampling Method(s)	Program
LDWF 0556	Bay Rambo	CDP	Bay/Estuary	2002	17	336	1.63	Gill Net - Varying Sizes	MFI
LDWF 0556	Bay Rambo	CDP	Bay/Estuary	2003	19	484	1.68	Gill Net - Varying Sizes	MFI
LDWF 0556	Bay Rambo	CDP	Bay/Estuary	2004	22	649	1.53	Gill Net - Varying Sizes	MFI
LDWF 0572	Bay Rambo	CDP	Bay/Estuary	2001	22	802	1.84	Gill Net - Varying Sizes	MFI
LDWF 0572	Bay Rambo	CDP	Bay/Estuary	2002	17	829	1.13	Gill Net - Varying Sizes	MFI
LDWF 0572	Bay Rambo	CDP	Bay/Estuary	2003	14	104	2.18	Gill Net - Varying Sizes	MFI
LDWF 0572	Bay Rambo	CDP	Bay/Estuary	2004	20	666	1.2	Gill Net - Varying Sizes	MFI
								50' seine, 1/4 in. delta	
LDWF 0550	W of Caillou Lake	CDP	Bay/Estuary	2001	45	7808	1.53	mesh	MFI
								50' seine, 1/4 in. delta	
LDWF 0550	W of Caillou Lake	CDP	Bay/Estuary	2002	36	4990	1.68	mesh	MFI
								50' seine, 1/4 in. delta	
LDWF 0550	W of Caillou Lake	CDP	Bay/Estuary	2003	36	3074	2.12	mesh	MFI
								50' seine, 1/4 in. delta	
LDWF 0550	W of Caillou Lake	CDP	Bay/Estuary	2004	36	3782	1.36	mesh	MFI
	Canal E of							750' dipped tram (1	
LDWF 0589	Montegut	CDP	Canal	2001	11	907	1.3	5/8" in, 6" out	MFI
	Canal E of							750' dipped tram (1	
LDWF 0589	Montegut	CDP	Canal	2002	12	982	1.21	5/8" in, 6" out	MFI
	Canal E of							750' dipped tram (1	
LDWF 0589	Montegut	CDP	Canal	2003	11	1258	1.54	5/8" in, 6" out	MFI
	Canal E of							750' dipped tram (1	
LDWF 0589	Montegut	CDP	Canal	2004	13	1084	1.65	5/8" in, 6" out	MFI
LDWF 1005	Little Lake	CDP	Lake	2002	13	44	2.36	Rotenone, 1 acre	IFI
LDWF 1005	Little Lake	CDP	Lake	2003	12	23	2.32	Rotenone, 1 acre	IFI
LDWF 1005	Little Lake	CDP	Lake	2004	7	24	1.29	Rotenone, 1 acre	IFI
I DIME OF TO	Canal SE of	055		0004	4-	1105			
LDWF 0559	Montegut	CDP	Canal	2001	15	1135	2.04	Gill Net - Varying Sizes	MFI
I DIME OFFO	Canal SE of	000	0.5.1	0000	00	4000	4.04	Gill Niet - Memilien Giller	N 4 E-1
LDWF 0559	Montegut	CDP	Canal	2002	22	1899	1.94	Gill Net - Varying Sizes	MFI
I DWE OFFO	Canal SE of	000	Const	2002	10	4447	_	Cill Not Mamilian Circa	MEI
LDWF 0559	Montegut	CDP	Canal	2003	19	1117	2	Gill Net - Varying Sizes	MFI
I DWE 0550	Canal SE of	CDP	Const	2004	21	1244	2.10	Cill Not Varying Sizes	MFI
LDWF 0559	Montegut	CDP	Canal	2004	21	1244	2.18	Gill Net - Varying Sizes	IVITI

Table D-6. Fish species found by USEPA (2007) at reference sites in the Terrebonne Basin sampled with electroshocking, gill nets, and trawling.

'X' indicates the fish species was observed at the site. F – freshwater; E – estuarine; M – marine, F/M – freshwater and marine.

	Estuarine,									Samp	ling me	thods a	and site	es						
	Marine, or Freshwater				Elect	rosho	cking	j				G	ill Nets	3			Т	rawlin	g	
Species Description	Species	C1	C2	C3	C4	C5	C6	C 7	C9	C10	C11	C12	C13	C14	C15	C11	C12	C13	C14	C15
AMERICAN EEL	F/M		Χ		Χ			Χ	Χ											
ATLANTIC CROAKER	Е															Х	Х	Х	Х	Х
ATLANTIC SPADEFISH	М											Х				Х	Х	Х		Х
BAY ANCHOVY	Е															Х	Х	Х	Х	Х
BAY WHIFF	Е																Х			
BLACK CRAPPIE	F		Х	Х	Х	Х	Х	Х		Х										
BLACK DRUM	Е													Χ						
BLACKCHEEK TONGUEFISH	Е																Х			
BLUE CATFISH	F						Χ			Х										
BOWFIN	F		Х		Χ	Χ	Χ	Х	Χ	Х										
BULL SHARK	М												Χ	Х						
CHAIN PIPEFISH	E																Х			
CHANNEL CATFISH	F		Χ		Χ			Χ	Χ	Х										
COMMON BLUEGILL	F	Χ	Х	Х	Χ	Χ	Χ	Х	Χ	Х										
COMMON CARP	F		Х	Х	Χ	Χ	Χ	Х												
FLATHEAD CATFISH	F							Χ												
FRESHWATER DRUM	F	Х	Х		Х		Х	Х												
GAFFTOPSAIL CATFISH	E											Х	Х			Х	Х	Х	Х	Х
GIZZARD SHAD	F	Χ	Χ	Χ	Χ	Χ	Χ		Χ	X										
GOLDEN SHINER	F									Χ										
GULF MENHADEN	Е											X								
GULF TOADFISH	Е															Х	Χ	Χ		Х
HARDHEAD CATFISH	Е										Х	Х	Х		Х		Х			
LADYFISH	Е					Х		Х									Х			
LARGEMOUTH	F	Х	Х	Х	Χ	Χ	Χ	Х		Х										

	Estuarine,								Samp	ling me	thods a	and site	es							
	Marine, or				Elect	rosho	cking	ı				G	ill Nets	3			Т	rawling	<u></u>	
Species Description	Freshwater Species	C1	C2	СЗ	C4	C5	C6	C7	C9	C10	C11	C12	C13	C14	C15	C11	C12	C13	C14	C15
BASS	Ореслес																			
LEAST PUFFERFISH	Е															Х	Х		Х	Х
LONGEAR SUNFISH	F	Х	Х		Х															
LOOK DOWN	M																Х			
PINFISH	E															Х	X	Х		Х
RED DRUM	E													Х						
REDEAR SUNFISH	F		Х		Х	Х	Х	Х						,,						
SAND SEATROUT	E				- , ,		,,	- , ,										Х	Х	
SHEEPSHEAD	E																Х	X		Х
SILVER CARP	F	Х																		
SILVER PERCH	E																	Х	Х	
SKIPJACK HERRING	F	Х						Х	Х	Х										
SMALLMOUTH																				
BUFFALO	F	Χ	Χ	Χ	Х		Χ	Χ												
SOUTHERN																				
FLOUNDER	E																X			
SOUTHERN																	.,		.,	
STINGRAY	M																Х		Х	
SPANISH MACKEREL	M																	Х		
SPECKLED TROUT	E										X	Х					Х	X		Х
SPECKLED TROUT	E										^						X	X		X
SPOTTED GAR	F		Х	V	Х	Х	Х	V	V	V							_^			
	•		Λ	Х	٨	٨	Λ	Х	Χ	Х										1
STRIPED BLENNY	M		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \															Х		
STRIPED MULLET	E	X	Х	Х	Х	Х	Х	Х	Χ	Х										
THREADFIN SHAD	F	Х																		
UNKNOWN SEATROUT	E																	Х	X	
VIOLET GOBY	E															-	Х	X	X	
WARMOUTH	F		Х		Х							-				-				
WHITE CRAPPIE	F	Х	^	 								 				 			 	
	·		4.5	_	4.5	40	40	4.5	_	44	_		_	_	1	7	40	4.5		10
Total Number of Spec	ies per Sité	11	15	8	15	10	12	15	8	11	2	5	3	3	1	7	19	15	9	10

Table D-7. Percent composition of freshwater, estuarine, marine, and mixed freshwater and marine fish species in the Terrebonne Basin from reference sites sampled by USEPA (2007).

			in reference s		Da by COLI	, , , <u>_</u> , .				
EPA Site	Ecoregion	LDEQ Waterbody Type	USEPA Classification	Species Richness (# of species)	Abundance (# of individuals)	Sampling Method	Estuarine	Freshwater	Marine	Fresh/ Marine
C1	LMRAP	Stream	Freshwater	11	124	Electroshocking	3.23%	96.77%	0.00%	0.00%
C2	LMRAP	Stream	Freshwater	15	118	Electroshocking	9.32%	89.83%	0.85%	0.00%
C3	LMRAP	Stream	Freshwater	8	74	Electroshocking	2.70%	97.30%	0.00%	0.00%
C4	LMRAP	Stream	Freshwater	15	205	Electroshocking	1.46%	98.05%	0.49%	0.00%
C5	LMRAP	Stream	Freshwater	10	129	Electroshocking	10.85%	89.15%	0.00%	0.00%
C6	LMRAP	Stream	Mixed	12	169	Electroshocking	15.98%	84.02%	0.00%	0.00%
C7	LMRAP	Lake	Mixed	15	123	Electroshocking	33.33%	65.04%	1.63%	0.00%
C9	LMRAP	Lake	Mixed	8	119	Electroshocking	55.46%	42.86%	1.68%	0.00%
C10	CDP	Bay/Estuary	Mixed	11	126	Electroshocking	3.97%	96.03%	0.00%	0.00%
C11	CDP	Stream	Saltwater	9	162	Trawling, Gillnetting	83.95%	0.00%	0.00%	16.05%
C12	CDP	Stream	Saltwater	20	1134	Trawling, Gillnetting	98.77%	0.00%	0.00%	1.23%
C13	CDP	Stream	Saltwater	17	1162	Trawling, Gillnetting	98.97%	0.00%	0.00%	1.03%
C14	CDP	Stream	Saltwater	12	825	Trawling, Gillnetting	99.64%	0.00%	0.00%	0.36%
C15	CDP	Stream	Saltwater	11	104	Trawling, Gillnetting	94.23%	0.00%	0.00%	5.77%

Table D-8. Representative, or key, species found at reference sites in the Coastal Deltaic Plain Ecoregion in Louisiana.

Reference sites consist primarily of freshwater and estuarine mixed waters, open bay areas, canals and bayous. Key species are those observed at greater than 80% of reference sites (species list compiled from historical LDEQ data).

Species	Species	Trophic Level	Spawning Season
Description			
BLACK CRAPPIE	Pomoxis nigromaculatus	ontogenetically insectivorous/piscivorous	February - March in Mississippi
		insectivorous/crustacivorous/ovovorous/ occasional	
BLUEGILL	Lepomis macrochirus	herbivory	21-32°C
COMMON CARP	Cyprinus carpio	benthically omnivorous	April through June (17-27°C)
		ontogenetically insectivorous/crustacivorous (some	
GREEN SUNFISH	Lepomis cyanellus	small fishes)	uncertain
GULF MENHADEN	Brevoortia patronus	zooplanktivorous/phytoplanktivorous	October to April
LARGEMOUTH		ontogenetically insectivorous/piscivorous (occasional	late winter/early spring
BASS	Micropterus salmoides	bird, reptile, amphibian, rodent)	(15-24°C)
ORANGESPOTTED			April - September in Louisiana
SUNFISH	Lepomis humilis	insectivorous/microcrustacivorous	(>18°C)
REDEAR SUNFISH	Lepomis microlophus	benthis molluscivorous/insectivorous/crustacivorous	spring/early summer (21-32°C)
		ontogenetically	
SPOTTED GAR	Lepisosteus oculatus	insectivorous/crustacivorous/piscivorous	spring (April) in Oklahoma
STRIPED MULLET	Mugil cephalus	ontogenetically omnivorous to a large degree	October to early February
THREADFIN SHAD	Dorosoma petenense	phytoplanktivorous/insectivorous/piscivorous/ovovorous	spring (21°C)
YELLOW			
BULLHEAD	Ameiurus natalis	insectivorous/crustacivorous/piscivorous	late spring/early summer

References: Ross, S.T. 2001. *The Inland Fishes of Mississippi*. University Press of Mississippi, Jackson, Mississippi; U.S. Fish and Wildlife Service. *Habitat Suitability Index Models*. http://www.nwrc.usgs.gov/wdb/pub/hsi/hsiindex.htm.

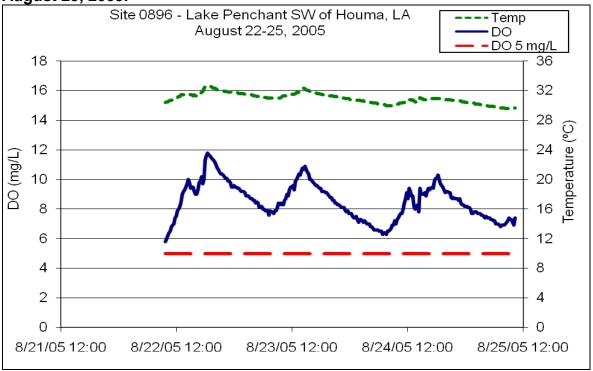
Table D-9. Representative, or key, species found at reference sites in the Lower Mississippi River Alluvial Plain Ecoregion in Louisiana.

Reference sites consist primarily of freshwater and estuarine mixed waters, open bay/lake areas, canals and bayous. Key species are those observed at greater than 80% of reference sites (species list compiled from historical LDEQ data).

Species Description	Species	Trophic Level	Spawning Season
BLACK CRAPPIE	Pomoxis nigromaculatus	ontogenetically insectivorous/piscivorous	February - March in Mississippi
BLUEGILL	Lepomis macrochirus	insectivorous/crustacivorous/ovovorous/ occasional herbivory	21-32°C
BOWFIN	Amia calva	ontogenetically insectivorous/piscivorous (some crustaceans)	spring in Mississippi
CHANNEL CATFISH	Ictalurus punctatus	omnivorous	late spring/early summer (16-24°C)
COMMON CARP	Cyprinus carpio	benthically omnivorous	April through June (17-27°C)
GIZZARD SHAD	Dorosoma cepedianum	ontogenetically zooplanktivorous/phytoplanktivorous	April to mid-June (10-21°C)
GREEN SUNFISH	Lepomis cyanellus	ontogenetically insectivorous/crustacivorous (some small fishes)	Uncertain
LARGEMOUTH BASS	Micropterus salmoides	ontogenetically insectivorous/piscivorous (occasional bird, reptile, amphibian, rodent)	late winter/early spring (15-24°C)
ORANGESPOTTED SUNFISH	Lepomis humilis	insectivorous/microcrustacivorous	April - September in Louisiana (>18°C)
REDEAR SUNFISH	Lepomis microlophus	benthis molluscivorous/insectivorous/crustacivorous	spring/early summer (21-32°C)
SMALLMOUTH BUFFALO	Ictiobus bubalus	benthically omnivorous	March to May (13.9-21.1°C)
SPOTTED GAR	Lepisosteus oculatus	ontogenetically insectivorous/crustacivorous/piscivorous	spring (April) in Oklahoma
STRIPED MULLET	Mugil cephalus	ontogenetically omnivorous to a large degree	October to early February
THREADFIN SHAD	Dorosoma petenense	phytoplanktivorous/insectivorous/piscivorous/ovovorous	spring (21°C)
WARMOUTH	Lepomis gulosus	ontogenetically insectivorous/crustacivorous/piscivorous	May - August (21.1°C)
WHITE CRAPPIE	Pomoxis annularis	ontogenetically insectivorous/piscivorous	March - May (16-20°C)

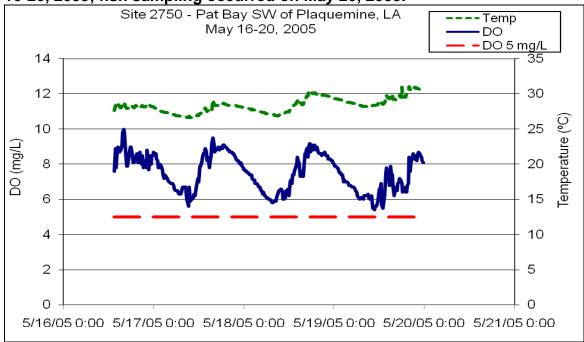
References: Ross, S.T. 2001. *The Inland Fishes of Mississippi*. University Press of Mississippi, Jackson, Mississippi; U.S. Fish and Wildlife Service. *Habitat Suitability Index Models*. http://www.nwrc.usgs.gov/wdb/pub/hsi/hsiindex.htm.

Figure D-1. Fish sampling with electroshocker at Site 0896 Lake Penchant in the Coastal Deltaic Plain (CDP) Ecoregion. Continuous monitoring water quality data collected from August 22-25, 2005; fish sampling occurred on August 23, 2005.



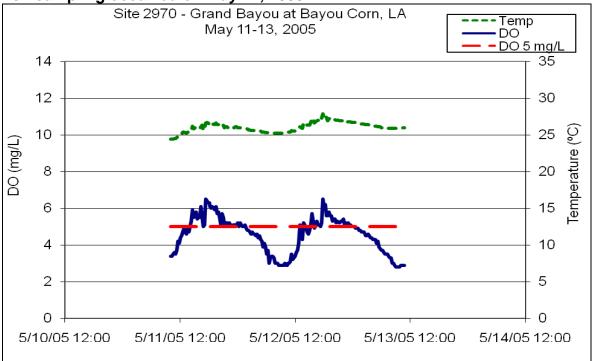
Fish Species	Abundance (# of individuals)
BLACK CRAPPIE	7
BLUEGILL	27
CARP	6
GREEN SUNFISH	4
LADYFISH	1
LARGEMOUTH BASS	5
ORANGESPOTTED SUNFISH	1
REDEAR SUNFISH	4
SHEEPSHEAD	1
SPOTTED GAR	4
STRIPED MULLET	9
THREADFIN SHAD	1
YELLOW BULLHEAD	2
Total Abundance (# of individuals)	72

Figure D-2. Fish sampling with hoop net at Site 2750 Pat Bay (stream waterbody type) in the Lower Mississippi River Alluvial Plain (LMRAP) Ecoregion. Continuous monitoring water quality data collected from May 16-20, 2005; fish sampling occurred on May 20, 2005.



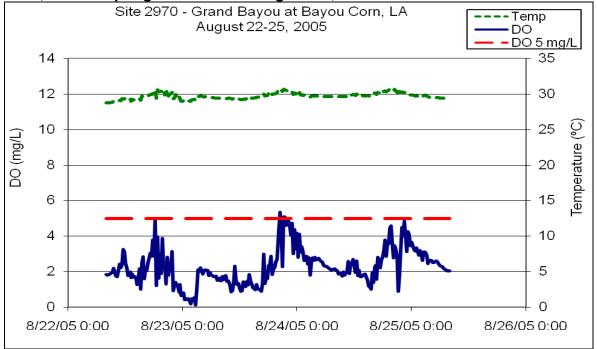
Fish Species	Abundance (# of individuals)
CHANNEL CATFISH	4
LONGEAR SUNFISH	1
Total Abundance (# of individuals)	5

Figure D-3. Fish sampling with electroshocker at Site 2970 Grand Bayou stream in the Lower Mississippi River Alluvial Plain (LMRAP) Ecoregion. Continuous monitoring water quality data collected from May 11-13, 2005; fish sampling occurred on May 12, 2005.



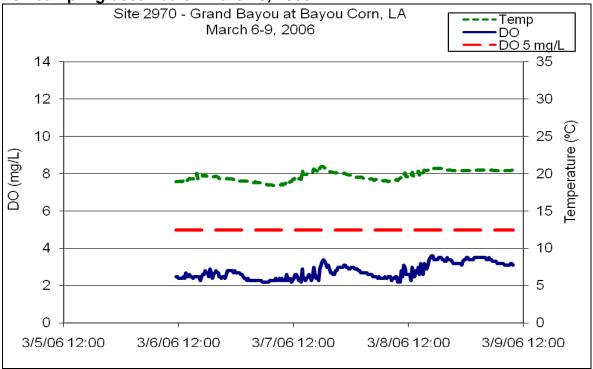
Fish Species	Abundance (# of individuals)
BLACK BULLHEAD	1
BLACK CRAPPIE	32
BLUEGILL	72
BOWFIN	2
CARP	14
GIZZARD SHAD	1
GOLDEN SHINER	1
GREEN SUNFISH	7
LARGEMOUTH BASS	8
LONGEAR SUNFISH	4
ORANGESPOTTED SUNFISH	6
REDEAR SUNFISH	18
SHORTNOSE GAR	1
SILVERY MINNOW	1
SPOTTED GAR	13
STRIPED MULLET	2
WARMOUTH	10
WHITE CRAPPIE	4
Total Abundance (# of individuals)	197

Figure D-4. Fish sampling with electroshocker at Site 2970 Grand Bayou stream in the Lower Mississippi River Alluvial Plain (LMRAP) Ecoregion. Continuous monitoring water quality data collected from August 22-25, 2005; fish sampling occurred on August 24, 2005.



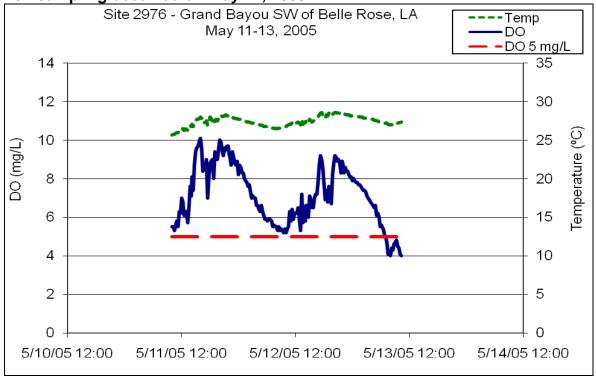
Fish Species	Abundance (# of individuals)
BLACK CRAPPIE	15
BLUEGILL	79
BOWFIN	2
BROWN BULLHEAD	4
CARP	9
GIZZARD SHAD	4
GOLDEN SHINER	4
GREEN SUNFISH	9
LARGEMOUTH BASS	4
ORANGESPOTTED SUNFISH	9
REDEAR SUNFISH	5
SMALLMOUTH BUFFALO	4
SPOTTED GAR	9
STRIPED MULLET	3
THREADFIN SHAD	6
WARMOUTH	8
WHITE CRAPPIE	1
Total Abundance (# of individuals)	175

Figure D-5. Fish sampling with electroshocker at Site 2970 Grand Bayou stream in the Lower Mississippi River Alluvial Plain (LMRAP) Ecoregion. Continuous monitoring water quality data collected from March 6-9, 2006; fish sampling occurred on March 8, 2006.



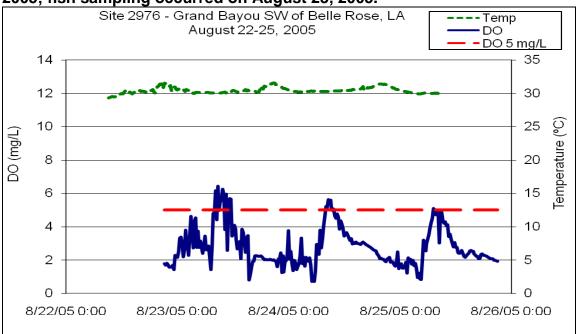
Fish Species	Abundance (# of individuals)
BAY ANCHOVY	3
BLACK CRAPPIE	12
BLUE CATFISH	2
BLUEGILL	32
CHANNEL CATFISH	3
GIZZARD SHAD	2
LARGEMOUTH BASS	2
REDEAR SUNFISH	1
SMALLMOUTH BUFFALO	116
SPOTTED GAR	112
STRIPED MULLET	6
WHITE CRAPPIE	9
Total Abundance (# of individuals)	300

Figure D-6. Fish sampling with electroshocker at Site 2976 Grand Bayou stream in the Lower Mississippi River Alluvial Plain (LMRAP) Ecoregion. Continuous monitoring water quality data collected from May 11-13, 2005; fish sampling occurred on May 12, 2005.



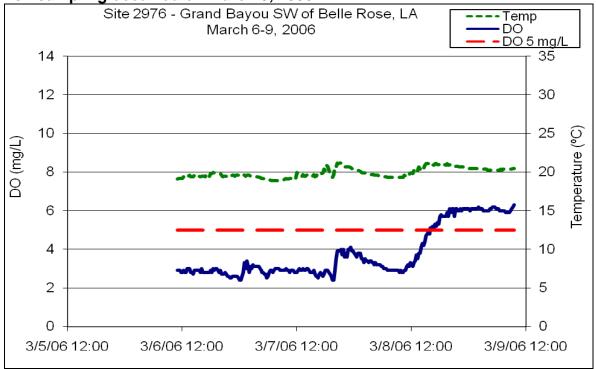
Fish Species	Abundance (# of individuals)
BLACK CRAPPIE	19
BLUE CATFISH	2
BLUEGILL	104
BOWFIN	1
BREAM	16
CARP	5
CHANNEL CATFISH	4
FLATHEAD CATFISH	1
FRESHWATER DRUM	2
GREEN SUNFISH	20
LARGEMOUTH BASS	9
LONGEAR SUNFISH	3
ORANGESPOTTED SUNFISH	5
PIRATE PERCH	1
REDEAR SUNFISH	16
SHORTNOSE GAR	6
SILVERY MINNOW	4
SPOTTED GAR	5
STRIPED MULLET	22
THREADFIN SHAD	12
WHITE CRAPPIE	1
YELLOW BULLHEAD	2
Total Abundance (# of individuals)	260

Figure D-7. Fish sampling with electroshocker at Site 2976 Grand Bayou stream in the Lower Mississippi River Alluvial Plain (LMRAP) Ecoregion. Continuous monitoring water quality data collected from August 22-25, 2005; fish sampling occurred on August 23, 2005.



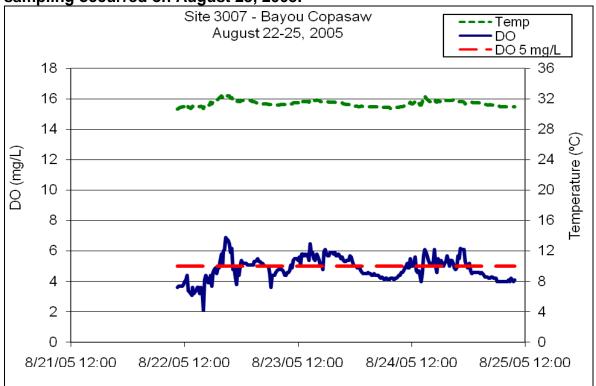
Fish Species	Abundance (# of individuals)
BAY ANCHOVY	1
BLACK CRAPPIE	7
BLUE CATFISH	2
BLUEGILL	35
BOWFIN	1
BROWN BULLHEAD	1
CARP	6
CHANNEL CATFISH	1
FRESHWATER DRUM	1
GOLDEN SHINER	2
GREEN SUNFISH	3
HERRING SPP.	1
LARGEMOUTH BASS	13
LONGEAR SUNFISH	3
REDEAR SUNFISH	5
SMALLMOUTH BUFFALO	3
SPOTTED GAR	10
STRIPED MULLET	8
THREADFIN SHAD	3
WARMOUTH	11
Total Abundance (# of individuals)	117

Figure D-8. Fish sampling with electroshocker at Site 2976 Grand Bayou stream in the Lower Mississippi River Alluvial Plain (LMRAP) Ecoregion. Continuous monitoring water quality data collected from March 6-9, 2006; fish sampling occurred on March 8, 2006.



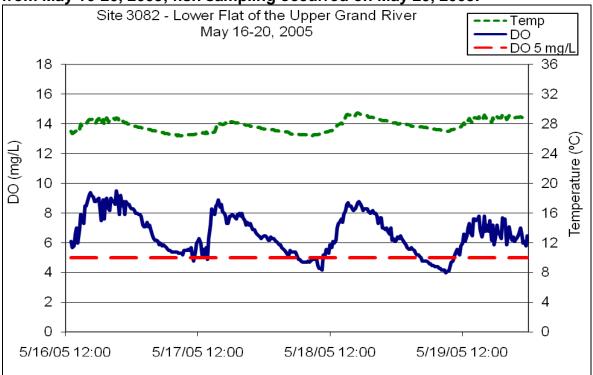
Fish Species	Abundance (# of individuals)
BAY ANCHOVY	7
BLACK CRAPPIE	7
BLUEGILL	64
BROOK SILVERSIDE	1
CARP	7
CHANNEL CATFISH	2
FRESHWATER DRUM	2
GIZZARD SHAD	6
GOLDEN SHINER	4
LARGEMOUTH BASS	11
ORANGESPOTTED SUNFISH	2
REDEAR SUNFISH	4
SMALLMOUTH BUFFALO	8
SPOTTED GAR	2
STRIPED MULLET	9
THREADFIN SHAD	1
WARMOUTH	2
WHITE CRAPPIE	2
Total Abundance (# of individuals)	141

Figure D-9. Fish sampling with electroshocker at Site 3007 Bayou Copasaw stream in the Coastal Deltaic Plain (CDP) Ecoregion. Continuous monitoring water quality data collected from August 22-25, 2005; fish sampling occurred on August 23, 2005.



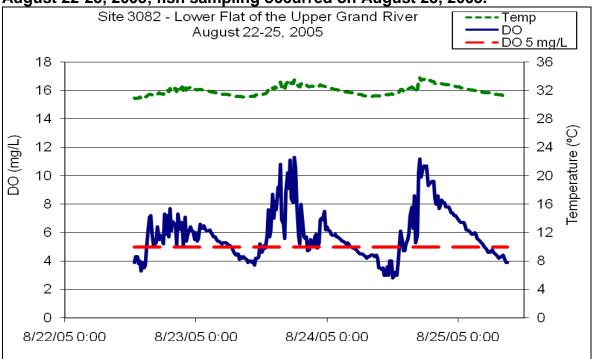
Fish Species	Abundance (# of individuals)
ATLANTIC SPADEFISH	1
BAY ANCHOVY	3
BLACK CRAPPIE	12
BLUEGILL	179
CARP	22
GIZZARD SHAD	3
GOLDEN SHINER	1
GREEN SUNFISH	7
GULF MENHADEN	3
LARGEMOUTH BASS	19
ORANGESPOTTED SUNFISH	1
REDEAR SUNFISH	7
SMALLMOUTH BUFFALO	1
SPOTTED GAR	14
STRIPED MULLET	1
THREADFIN SHAD	5
WARMOUTH	4
WHITE CRAPPIE	2
YELLOW BULLHEAD	2
Total Abundance (# of individuals)	287

Figure D-10. Fish sampling with hoop net at Site 3082 Lower Flat of the Upper Grand River stream in the Lower Mississippi River Alluvial Plain (LMRAP) Ecoregion. Continuous monitoring water quality data collected from May 16-20, 2005; fish sampling occurred on May 20, 2005.



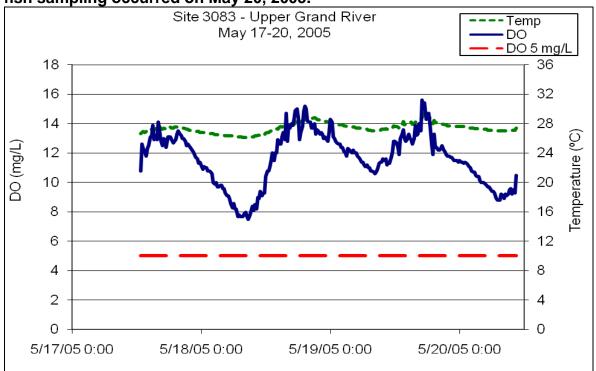
Fish Species	Abundance (# of individuals)
CHANNEL CATFISH	8
Total Abundance (# of individuals)	8

Figure D-11. Fish sampling with seine at Site 3082 Lower Flat of the Upper Grand River stream in the Lower Mississippi River Alluvial Plain (LMRAP) Ecoregion. Continuous monitoring water quality data collected from August 22-25, 2005; fish sampling occurred on August 25, 2005.



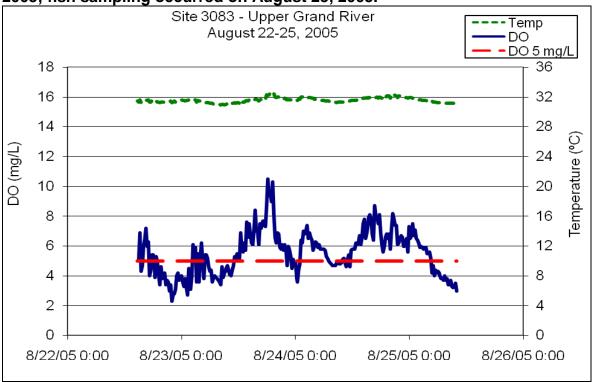
Fish Species	Abundance (# of individuals)
CHANNEL CATFISH	3
Total Abundance (# of individuals)	3

Figure D-12. Fish sampling with hoop net at Site 3083 Upper Grand River stream in the Lower Mississippi River Alluvial Plain (LMRAP) Ecoregion. Continuous monitoring water quality data collected from May 17-20, 2005; fish sampling occurred on May 20, 2005.



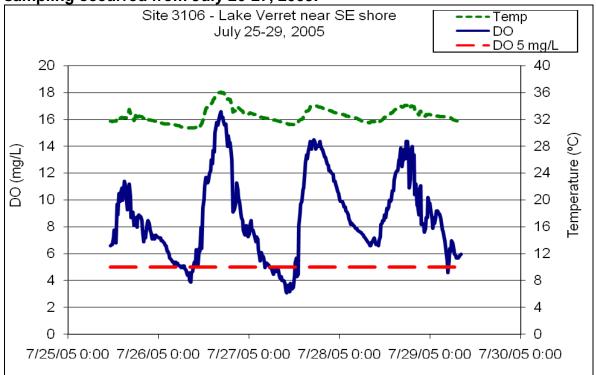
Fish Species	Abundance (# of individuals)
BLUE CATFISH	4
BLUEGILL	1
CHANNEL CATFISH	17
GREEN SUNFISH	1
Total Abundance (# of individuals)	23

Figure D-13. Fish sampling with seine at Site 3083 Upper Grand River stream in the Lower Mississippi River Alluvial Plain (LMRAP) Ecoregion. Continuous monitoring water quality data collected from August 22-25, 2005; fish sampling occurred on August 25, 2005.



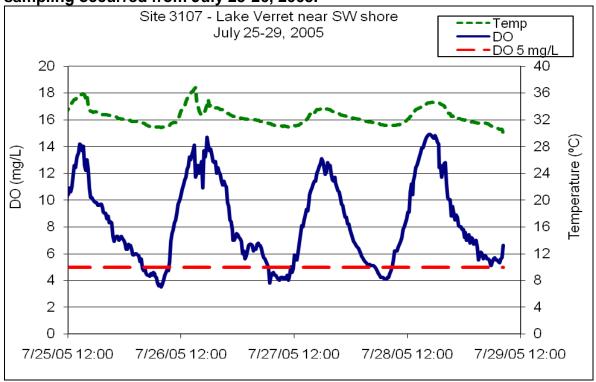
Fish species	Abundance (# of individuals)
BLUE CATFISH	4
BLUEGILL	1
CHANNEL CATFISH	17
GREEN SUNFISH	1
Total Abundance (# of individuals)	23

Figure D-14. Fish sampling with rotenone at Site 3106 Lake Verret in the Lower Mississippi River Alluvial Plain (LMRAP) Ecoregion. Continuous monitoring water quality data collected from July 25-29, 2005; fish sampling occurred from July 26-27, 2005.



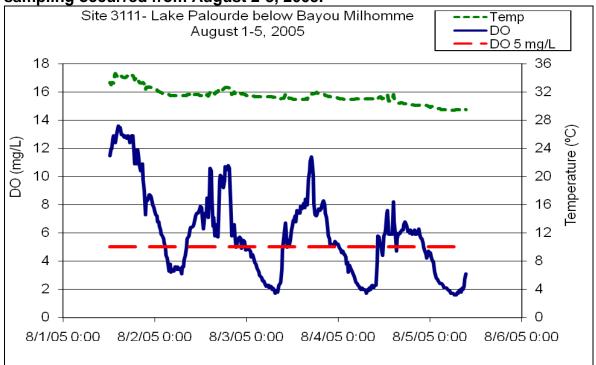
Fish Species	Abundance (# of individuals)
BAY ANCHOVY	2
BLACK BULLHEAD	4
BLACK CRAPPIE	2
BLUEGILL	16
CHANNEL CATFISH	23
CLOWN GOBY	7
FLATHEAD CATFISH	5
FRESHWATER DRUM	5
GIZZARD SHAD	22
GULF PIPEFISH	1
LARGEMOUTH BASS	9
LINED SOLE	1
MADTOMS	5
PIRATE PERCH	1
REDEAR SUNFISH	3
SKIPJACK HERRING	1
SPECKLED WORM EEL	2
STRIPED MULLET	10
WARMOUTH	2
Total Abundance (# of individuals)	121

Figure D-15. Fish sampling with rotenone at Site 3107 Lake Verret in the Lower Mississippi River Alluvial Plain (LMRAP) Ecoregion. Continuous monitoring water quality data collected from July 25-29, 2005; fish sampling occurred from July 25-26, 2005.



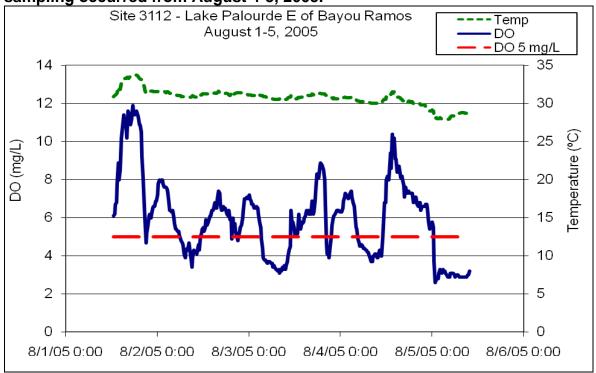
Fish Species	Abundance (# of individuals)
BAY ANCHOVY	1
BLACK BULLHEAD	1
BLACK CRAPPIE	2
BLUE CATFISH	1
BLUEGILL	15
CHANNEL CATFISH	16
CLOWN GOBY	1
FRESHWATER DRUM	1
GIZZARD SHAD	17
GULF PIPEFISH	1
HYBRID SUNFISH	1
LARGEMOUTH BASS	2
LINED SOLE	1
LONGEAR SUNFISH	2
MADTOMS	3
SKIPJACK HERRING	1
SMALLMOUTH BUFFALO	1
SPOTTED GAR	1
STRIPED MULLET	1
WARMOUTH	1
YELLOW BASS	1
Total Abundance (# of individuals)	71

Figure D-16. Fish sampling with rotenone at Site 3111 Lake Palourde in the Lower Mississippi River Alluvial Plain (LMRAP) Ecoregion. Continuous monitoring water quality data collected from August 1-5, 2005; fish sampling occurred from August 2-3, 2005.



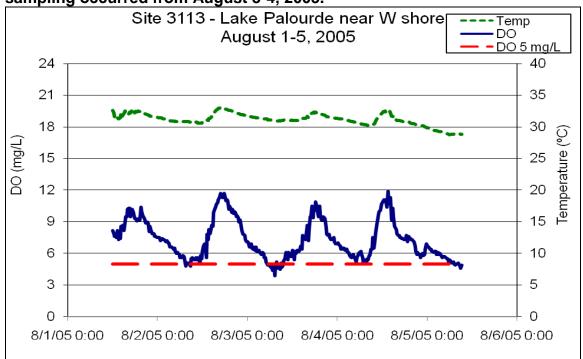
Fish Species	Abundance (# of individuals)
ATLANTIC NEEDLEFISH	1
BAY ANCHOVY	2
BLACK CRAPPIE	6
BLUEGILL	12
CHANNEL CATFISH	19
CLOWN GOBY	1
FLATHEAD CATFISH	9
FRESHWATER DRUM	13
GIZZARD SHAD	8
LADYFISH	1
LARGEMOUTH BASS	6
LINED SOLE	3
LONGEAR SUNFISH	10
MADTOMS	1
PIRATE PERCH	2
REDEAR SUNFISH	6
SHEEPSHEAD	1
SMALLMOUTH BUFFALO	4
SPECKLED WORM EEL	1
SPOTTED GAR	1
SPOTTED SUNFISH	3
STRIPED MULLET	2
WARMOUTH	5
YELLOW BULLHEAD	1
Total Abundance (# of individuals)	118

Figure D-17. Fish sampling with rotenone at Site 3112 Lake Palourde in the Lower Mississippi River Alluvial Plain (LMRAP) Ecoregion. Continuous monitoring water quality data collected from August 1-5, 2005; fish sampling occurred from August 4-5, 2005.



Fish Species	Abundance (# of individuals)
AMERICAN EEL	5
BAY ANCHOVY	2
BLACK CRAPPIE	5
BLUE CATFISH	8
BLUEGILL	15
CHANNEL CATFISH	46
CLOWN GOBY	3
FLATHEAD CATFISH	9
FRESHWATER DRUM	20
GIZZARD SHAD	25
HOGCHOKER	3
LARGEMOUTH BASS	1
LONGEAR SUNFISH	8
MADTOMS	7
SMALLMOUTH BUFFALO	5
SPOTTED GAR	8
STRIPED MULLET	1
THREADFIN SHAD	2
YELLOW BASS	3
Total Abundance (# of individuals)	176

Figure D-18. Fish sampling with rotenone at Site 3113 Lake Palourde in the Lower Mississippi River Alluvial Plain (LMRAP) Ecoregion. Continuous monitoring water quality data collected from August 1-5, 2005; fish sampling occurred from August 3-4, 2005.



Fish Species	Abundance (# of individuals)
AMERICAN EEL	8
BAY ANCHOVY	2
BIGMOUTH BUFFALO	1
BLACK CRAPPIE	5
BLUE CATFISH	2
BLUEGILL	15
CARP	3
CHANNEL CATFISH	33
CLOWN GOBY	1
FLATHEAD CATFISH	6
FRESHWATER DRUM	14
GIZZARD SHAD	31
GOLDEN SHINER	1
HOGCHOKER	5
LADYFISH	4
LARGEMOUTH BASS	8
LONGEAR SUNFISH	9
REDEAR SUNFISH	4
SMALLMOUTH BUFFALO	5
SPECKLED WORM EEL	9
SPOTTED GAR	5
STRIPED MULLET	15
THREADFIN SHAD	6
WARMOUTH	1
YELLOW BASS	3
YELLOW BULLHEAD	1
Total Abundance (# of individuals)	197